UNITED STATES COURT OF APPEAL
FOR THE FEDERAL CIRCUIT

94-1048

FERAG AG,

Plaintiff-Appellee

v.

QUIPP INCORPORATED,

Defendant-Appellant

O R D E R

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

ORDER

A combined petition for rehearing and suggestion for rehearing in banc having been filed by the APPELLEE, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the suggestion for rehearing in banc having been referred to the circuit judges who are in regular active service,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for rehearing be, and the same hereby is, DENIED and it is further

ORDERED that the suggestion for rehearing in banc be, and the same hereby is, DECLINED.

The mandate of the court will issue on March 9, 1995.

FOR THE COURT,
FRANCIS X. GINDHART, CLERK

Dated: March 2, 1995

(continued...)

By_____

Diane M. Frye

Chief Deputy Clerk

cc: JOEL M. FREED

RICHARD G. LIONE

FERAG AG V QUIPP INC, 94-1048

(DCT - 90-CV-712)

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Note: Pursuant to Fed. Cir. R. 47.6, this order is not citable as precedent. It is a public record.

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FERAG AG, Plaintiff, Appellee,

v.

QUIPP INCORPORATED, Defendant, Appellant.

No. 94-1048.
United States Court of Appeals,
Federal Circuit.
Jan. 24, 1995.

Before MAYER, MICHEL, and LOURIE, Circuit Judges.

MAYER, Circuit Judge.

Quipp Inc. appeals the judgment of the United States District Court for the Southern District of Florida, *Ferag Ag v. Quipp Inc.*, No. 90-CV-712 (S.D.Fla. Sept. 15, 1993), holding United States Patent No. 4,381,056, which has been reexamined, not invalid, enforceable, and infringed. We reverse.

Background

Ferag AG (Ferag), a Swiss corporation, is the owner of U.S. Patent No. 4,381,056 (the Ferag patent or the patent), entitled "Conveyor Apparatus, Especially for Printed Products." Ferag manufactures mailroom equipment for the publishing industry and sells that equipment in the United States through

Ferag, Inc., a Pennsylvania corporation partially owned by Ferag. At issue are reexamined claims 2, 10, 13-19, and 21 of the Ferag patent.[1]

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[1] Claim 10, depending from claims 9, 8, and 1 (all cancelled during reexamination), is representative. Cancelled claim 1 reads:

> 1. An article conveyor apparatus, especially for printed products, comprising:
>
> a revolvingly driven traction element;
>
> a plurality of gripper clamps anchored in spaced relationship and supported by said revolvingly driven traction element;
>
> each of said gripper clamps having a movable clamp portion and a further clamp portion coacting therewith;
>
> a stationary control device provided for said gripper clamps;
>
> actuation means coacting with the stationary control device for bringing the movable clamp portion into a closed position;
>
> a releasable locking device for fixedly retaining the movable clamp portion in such closed position;
>
> said locking device comprising a latching device having a defined latching position;
>
> said latching device having a latchable element;
>
> said actuation means being coupled with the latchable element of the latching device;
>
> and a spring element which is tensioned when the related gripper clamp is closed and which is operatively

Ferag's patent issued on April 26, 1983, from an application filed on January 15, 1981. The patent protects a conveyor apparatus. As claimed, a traction element, or chain,

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connected with the actuation means and with the movable clamp portion of such gripper clamp.

Cancelled claim 8 reads:

8. The conveyor apparatus as defined in claim 1, wherein:

said actuation means comprises a rotatably mounted shaft and an actuation element;

said latchable element of said latching device being arranged upon said rotatably mounted shaft;

and said rotatably mounted shaft being rigidly connected for rotation with said actuation element.

Cancelled claim 9, in turn, reads:

9. The conveyor apparatus as defined in claim 8, wherein:

said spring element is connected with said shaft and said movable clamp portion and is tensioned upon closing of the gripper clamp.

Finally, claim 10 reads:

10. The conveyor apparatus as defined in claim 9, wherein:

said spring element comprises a bending spring which, after bringing together the clamp portions, is tensioned in the latching position during further rotation of the shaft.

carries a number of specialized gripper clamps along a predetermined track. These clamps transport items, primarily newspapers and magazines, by gripping them between a stationary tongue and a movable tongue.

The claims at issue cover a conveyor apparatus, but aside from a brief reference to a traction element they focus exclusively on the details of the gripper clamps. It is the particular design of these clamps that distinguishes the patented invention from the prior art. Ferag concedes that the claimed clamps are embodied in Ferag's Model EP-100 clamps, incorporated in the Ferag EP-I/EP-II conveyor apparatus. Ferag had successfully tested the EP-100 gripper clamp by September of 1979.

Prior to March 31, 1979, Ferag owned all of the outstanding 100,000 shares of Ferag, Inc. stock. Then Ferag sold 100,000 additional shares of stock to Robert Smallacombe, and Smallacombe became chief executive officer and president of Ferag, Inc., and a member of Ferag, Inc.'s board of directors. Ferag and Smallacombe agreed to the creation of two voting trusts, whereby both Ferag and Smallacombe appointed independent voting trustees for 1,000 shares of Ferag, Inc. stock. Ferag appointed Susanne Reist, daughter of Walter Reist, Ferag's principal owner as a trustee; Smallacombe appointed his wife, Theresa Smallacombe. Ferag and Smallacombe could each vote a 49.5% interest in Ferag, Inc. Smallacombe's stock was subject to a buy back provision that allowed Ferag to reclaim the shares on March 31, 1987 if Ferag, Inc. had not eliminated its existing debt by that time.

An operations agreement between Ferag and Smallacombe

granted Smallacombe management authority over the operations of Ferag, Inc. This authority was limited by an agreement that Ferag, Inc. was to use its best efforts to sell, manufacture, and service Ferag products, and by a provision requiring the mutual consent of Ferag and Smallacombe for certain management decisions. Ferag also retained the right to veto personnel decisions on some management positions. Ferag agreed to make its research and development available to Ferag, Inc., and Ferag, Inc. agreed to maintain Ferag's confidentiality.

Early in 1979, Ferag entered into discussions with the Bergen Evening Record (Bergen), a New Jersey newspaper publisher, about installation of Ferag equipment. In March of that year, Ferag, Bergen, and Ferag, Inc. entered into a three-way "Partnership Agreement" that provided for the installation of two Ferag inserting systems at Bergen's Hackensack facility. Each system was to be composed of an inserting drum, ancillary equipment, and conveyors to and from the inserting system. The agreement listed rough price estimates for each element of the system, and provided a schedule for Bergen's payments. The agreement did not provide specific operational details about the systems, but it did spell out general performance criteria, including the approximate conditions (in terms of number of papers per hour and pages per paper) under which the parties anticipated that the systems could operate. Finally, the parties noted "the experimental nature of the undertaking", and, in a handwritten addendum, recognized the confidential price concessions granted by Ferag "for the purpose of providing a 'showplace' in the United States."

On June 13, 1979, Ferag, Inc. and Bergen entered into an "Equipment Sales Agreement" that incorporates the March partnership agreement by reference. Ferag contends that the conveyor system offered in these agreements did not embody the claimed invention. Indeed, Ferag says that it did not even begin work on the EP-I/EP-II system until July of 1979, so that the sales activity of March and June could not have involved a product embodying the claimed invention.

On November 23, 1979, Ferag sent Ferag, Inc. a document confirming a Ferag, Inc. order (apparently dated July 6, 1979) of an inserting system destined for Bergen. Among other equipment, the order confirmation clearly specifies end product "EP-1" and "EP-2" conveyors, conceded by Ferag to include the EP-100 gripper clamps embodying the patent claims. The November 23 document sets out a provisional price for the whole system and delivery dates for many of the system's components. Ferag apparently furnished no specific price or delivery date for the EP-I/EP-II system until January 24, 1980, when a subsequent order confirmation quoted prices and provided for a March 17, 1980 delivery date.

Quipp Inc. is a Florida corporation that, like Ferag, manufactures and sells a conveyor apparatus for printed products--the Quipp-Gripp Conveyor. Ferag filed this suit against Quipp on March 15, 1990, asserting that the Quipp-Gripp infringes the Ferag patent. In defense, Quipp argued that its product did not infringe the patent. It also alleged that the patent was invalid because Ferag had sold or offered for sale a product embodying the invention more than one year before the January

15, 1981, filing date, and that the patent was unenforceable because of Ferag's inequitable conduct during prosecution. On September 15, 1993, following a trial to the bench, the United States District Court for the Southern District of Florida found that Ferag had proved infringement by a preponderance of the evidence and concluded that Quipp had failed to carry its burden of showing invalidity and unenforceability by clear and convincing evidence. Quipp now appeals.

Discussion

Quipp challenges the district court's interpretation of the claims, its analysis of the scope and content of the prior art, and its application of the on sale bar. Because we conclude that the court misapplied the on sale bar, and that the patent was invalid under that bar, we do not reach the other grounds for appeal.

An inventor loses his right to a patent if he has placed his invention "in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. s 102(b) (1988). To invalidate a patent under the on sale bar, the party asserting the bar must demonstrate by clear and convincing evidence "that there was a definite sale or offer to sell more than one year before the application for the subject patent, and that the subject matter of the sale or offer to sell fully anticipated the claimed invention or would have rendered the claimed invention obvious by its addition to the prior art." *UMC Elec. Co. v. United States*, 816 F.2d 647, 656, 2 USPQ2d 1465, 1472 (Fed.Cir.1987). The ultimate determination that a

product was placed on sale under section 102(b) is a question of law, based on underlying facts. *Keystone Retaining Wall Sys. Inc. v. Westrock, Inc.*, 997 F.2d 1444, 1451, 27 USPQ2d 1297, 1303 (Fed.Cir.1993). We review the ultimate determination de novo, but any subsidiary fact findings must be reviewed, in this case, for clear error.

While a wide variety of factors may influence the on sale determination, no single one controls the application of section 102(b), for the ultimate conclusion depends on the totality of the circumstances. *Envirotech Corp. v. Westech Eng'g Inc.*, 904 F.2d 1571, 1574, 15 USPQ2d 1230, 1232 (Fed.Cir.1990). The underlying policies are what drives the section 102(b) analysis. *See King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 860, 226 USPQ 402, 407 (Fed.Cir.1985). Foremost among these is the policy of preventing inventors from exploiting the commercial value of their inventions while deferring the beginning of the statutory term. *See Envirotech*, 904 F.2d at 1574, 15 USPQ2d at 1232 (explaining policies underlying the bar). To this end, the inventor is strictly held to the requirement that he file his patent application within one year of any attempt to commercialize the invention. The demands of this policy must be weighed with the sometimes inconsistent goals of encouraging prompt and widespread disclosure of inventions to the public, discouraging the removal of inventions from the public domain when the public has come to rely on their ready availability, and giving inventors a reasonable period to discern the potential value of an invention. *Id.*

Quipp's first on sale argument centers on the transaction

between Ferag and Ferag, Inc. reflected in the November 1979 order confirmation. The district court declined to invalidate the patent based on this transaction because "Ferag, Inc. was not a separate entity from Ferag AG." *Ferag*, slip op. at 28. Quipp says that in November of 1979 Ferag, Inc. was distinct from Ferag, and that the transaction between them thus is a bar to Ferag's patent. We agree.

A section 102(b) sale or offer must involve separate entities. *In re Caveney*, 761 F.2d 671, 676, 226 USPQ 1, 4 (Fed.Cir.1985). Where, as in this case, the parties to an alleged sale are related, it is more difficult to determine whether the inventor is attempting to commercialize his invention; accordingly, in such cases whether there is a statutory bar depends on whether the seller so controls the purchaser that the invention remains out of the public's hands. *See Id.*

The district court concluded that Ferag retained sufficient control over Ferag, Inc. to avoid the statutory bar, based on "the proportion of outstanding shares held by the various parties; Ferag AG's ability to control critical materials and products; and the terms of the Operator's [sic] and Shareholder's agreements to which Mr. Smallacombe was a party." *Ferag*, slip op. at 28. We are convinced to the contrary that this evidence establishes that the two companies were separate and that the transaction reflected in the November order confirmation invokes the on sale bar.

Ferag and Ferag, Inc. were not controlled by the same person or group. The outstanding shares of Ferag, Inc. were evenly split between Smallacombe and Ferag's owners. This suggests shared control of Ferag, Inc., not control by Ferag or

Ferag's owners. The terms of the agreements between Ferag and Smallacombe also reflect shared control. Ferag gave Smallacombe "complete management authority over the operations of [Ferag, Inc.]." This authority was constrained only by a mutual consent clause mandating agreement between Smallacombe and Ferag for certain corporate decisions and by the clause subjecting Smallacombe's authority to hire and fire employees to Ferag approval for certain management positions. A requirement of mutual consent in a few limited circumstances, not implicated here, cannot change "complete management authority" to control by Ferag.

Ferag makes much of the clause requiring Ferag, Inc. to use its best efforts to sell and service Ferag products and not to sell competing products. Ferag also cites Ferag, Inc.'s obligation to protect the confidentiality of Ferag's research and development information. But these provisions, like Ferag's "ability to control critical materials and products" on which the district court relied, prove only that Ferag, Inc. was an exclusive distributor of Ferag products.

Ferag shared control over Ferag, Inc. with Smallacombe as to certain decisions, but Smallacombe's authority to run the company was otherwise essentially unfettered. Indeed, that autonomy is why Ferag brought in Smallacombe to run Ferag, Inc. in the first place, and why Smallacombe agreed to take the job. Because Ferag could not control Ferag, Inc.'s marketing of the invention, the two companies were separate entities for section 102(b) purposes and the transaction between them gives rise to a statutory bar.

The sale of a Ferag system to Bergen, which was the reason for the Ferag, Inc. purchase order, independently supports the conclusion that Ferag had placed the invention on sale before the critical date. The district court held that there was no on sale bar arising from this sale because Quipp had not proved that the product sold to Bergen embodied the patented invention. The court reached this conclusion because of its belief that for the on sale bar to apply, "[t]he patent owner must have had an intent to sell the invention prior to the bar date and that intent must be communicated to the public for the purposes of eliciting a sale prior to the bar date." *Ferag*, slip op. at 24. This is the wrong legal standard.[2]

As we said above, the overriding focus of section 102(b) is preventing inventors from reaping the benefits of the patent system beyond the statutory term. *King Instrument*, 767 F.2d at 860, 226 USPQ at 407. Accordingly, while what an offer or sale discloses to the public may tend to show whether the invention was on sale, the question is not whether the public knew of the invention, but

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[2] The district court declined to credit testimony by several of Quipp's witnesses en route to its determination that Quipp did not carry its burden of proving invalidity. The court also dismissed Quipp's documentary evidence as inconclusive. On this latter ruling, we disagree. We are persuaded that these documents, including the various agreements, are conclusive proof that the patented invention was on sale prior to the critical date. To the extent that this conclusion rests on factual findings, the district court clearly erred.

whether the product sold or offered embodies the invention claimed. *Id.* ("purchaser need not have actual knowledge of the invention for it to be on sale"). Indeed, an offer or sale may invoke the statutory bar "even though no details are disclosed." *RCA Corp. v. Data General Corp.*, 887 F.2d 1056, 1060, 12 USPQ2d 1449, 1452 (Fed.Cir.1989). Here, we have no doubt that Ferag did attempt to commercialize its invention in 1979, well before the critical date.

The district court cited *Envirotech* as support for its rule that "the patent owner must intend and the customer must understand at the ti[m]e of the sale that the invention is included in the product being sold." *Ferag*, slip op. at 25. The court misread *Envirotech*.

Envirotech owned a patent on a ballasted digester cover for use in wastewater treatment. The patented cover was a "hydroballaster" in which the cover floated on the surface of gases released during treatment of sewage, held in place by ballasting around the lower rim. Prior art devices had a more expensive fixed cover design.

The alleged offer was Envirotech's proposal to supply a digester cover to the general contractor on a city water treatment project. Envirotech conceded that it hoped to supply its patented hydroballaster cover, and it bid based on the lower cost of that design. Its proposal, however, made no mention of the new design, instead referencing the project specifications, which called for the old fixed cover. The district court found the patent invalid based on Envirotech's ultimate plan to use the hydroballaster on the project.

We reversed. We agreed that the on sale bar focuses on the inventor's attempt to commercialize his invention, but held that "the inventor's attempted exploitation must be objectively manifested as a definite sale or offer to sell the invention. The subjective, uncommunicated, and ultimate intention of the offeror, however clear, is not alone sufficient." 904 F.2d at 1575, 15 USPQ2d at 1233. Rejecting the district court's reliance on uncommunicated intent, we observed that Envirotech's bid documents specified the prior art design, and not the patented invention. Had the contractor chosen to refuse the suggested substitution, Envirotech would have been compelled to provide the prior art digester cover. We said "[w]hile there is no requirement that the purchaser have actual knowledge of the invention to invoke the on sale bar, what the purchaser reasonably believes the inventor to be offering is relevant to whether, on balance, the offer objectively may be said to be of the patented invention." Id. at 1576, 15 USPQ2d at 1234 (citation omitted).

The key question in *Envirotech*, and in the case before us today, is whether, under the totality of the circumstances, the inventor placed his invention on sale, objectively manifested by a sale or offer for sale of a product that embodies the invention claimed in the patent. We emphasize that this is an objective test, and that at its heart lies the inventor's attempt to commercialize the invention. The district court mistakenly relied on the seller's intent and the purchaser's understanding. But the measure of the bar is what was offered, not the patentee's intent. *Envirotech* recognized this, and turned on the determination that Envirotech's proposal offered only the prior art design.

It may be true that no one at Bergen knew that Ferag would supply a conveyor system within the claims of the patent, but here that lack of knowledge cuts in the opposite direction it did in *Envirotech*. There, the purchaser understood the proposal to specify the prior art digester cover design. That understanding was some evidence to support the conclusion that Envirotech's offer encompassed the prior art design. Here, Bergen may not have known that Ferag would supply the patented grippers, but neither did it have reason to expect to receive an old gripper design. This tells us nothing about what Ferag offered to Bergen. Accordingly, we must look elsewhere for objective evidence of what the subject matter of the Bergen sale was.

The March partnership agreement reveals Ferag's plan to showcase its new products at the Bergen facility. Its terms clearly include a contract for sale of a conveyor system, but it is not clear just what conveyor Ferag would supply. Indeed, the record suggests Ferag had not even begun development of the patented conveyor by that time. But the agreement did set forth functional specifications that the conveyor would meet. An existing prior art conveyor could have met these specifications, but the claimed conveyor, when it was developed, met them as well. What is clear, based on the November order confirmation, is that by November of 1979 Ferag had decided to supply the patented conveyor pursuant to its agreements with Bergen.

Taken together these documents reveal attempts by Ferag, manifested in both its transaction with Ferag, Inc. and the sale to Bergen, to commercialize the invention by November of 1979. Ferag does not suggest that it was engaged in experimentation or

that it was otherwise justified in waiting for over a year before applying for a patent on the conveyor system. Therefore, under the totality of the circumstances, we conclude Ferag placed the invention on sale before the critical date of January 15, 1980, and the patent is invalid under 35 U.S.C. s 102(b).

Conclusion

Accordingly, the judgment of the United States District Court for the Southern District of Florida is reversed.

REVERSED.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

94-1048

FERAG AG,
Plaintiff-Appellee,

v.

QUIPP INCORPORATED,
Defendant-Appellant.

JUDGMENT

ON APPEAL from the UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA (MIAMI)

in CASE NO(S). 90-CV-712

This CASE having been heard and considered, it is

ORDERED and ADJUDGED:

REVERSED

(continued...)

ENTERED BY ORDER OF THE COURT

DATED_____ _____

Francis X. Gindhart, Clerk

ISSUED AS A MANDATE:

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA

CASE NO. 90-712-CIV-NESBITT

FERAG AG

Plaintiff,

MEMORANDUM OPINION CONTAINING FINDINGS OF FACT AND CONCLUSIONS OF LAW

vs.

QUIPP INCORPORATED

Defendant.

_____/

This cause comes to the Court after a non-jury trial which commenced on April 6, 1993, and concluded on April 12, 1993. After careful consideration of the trial testimony, exhibits and all the memoranda and proposed findings of facts and conclusions of law, the Court renders the following opinion containing findings of fact and conclusions of law pursuant to Rule 52(a) of the Federal Rules of Civil Procedure.

I. BACKGROUND

This is an action for patent infringement in which the Plaintiff, Ferag AG of Switzerland ("Ferag") ha accused the Defendant Quipp, Incorporation of Miami, Florida ("Quipp") of infringing Eberle U.S. Patent No. 4,381,056 filed January 15, 1981, (the "Patent"). Quipp has defended on the basis on non-infringement; invalidity; and unenforceability of the Patent and has counterclaimed for a declaration that the Patent is not infringed, is invalid as obvious over the prior art; is invalid, because of prior commercialization, and unenforceable for failure to disclose Ferag's prior commercialization to the U.S. Patent and Trademark Office ("P.T.O."0.

Ferag is a corporation of Switzerland with a principal place of business in Hinwill, Switzerland. Ferag owns Eberle U.S. Patent No. 4,381,056 covering a Conveyor Apparatus, Especially For Printed Products.

Ferag manufactures and sells mailroom equipment for the publishing industry in the United States and abroad. Sales in the United States are made through Ferag, Inc., a United States corporation with its principal place of business in Bristol, Pennsylvania. Ferag AG and Ferag, Inc., are commonly owned by Walter Reist and his family.

Quipp, Incorporated is a Florida corporation with its principal place of business in Hialeah, Florida. Quipp, Incorporated , through its wholly-owned subsidiary, Quipp Systems, Inc., manufactures and sells in the United States a conveyor apparatus for printed products which it calls the Quipp-

Gripp Conveyor ("Quipp-Gripp"). Ferag contends that the Quipp-Gripp infringes the Eberle Patent.

The Eberle patent issues on April 16, 1993, from an application filed January 15, 1981. The Eberle patent was the subject to a Request for Reexamination filed October 12, 1988. A Reexamination Certificate No. B1 4,381,056 issued on July 25, 1989. a Certificate of Correction to the Reexamination Certificate issued on June 18, 1991.

The Eberle patent discloses a conveyor apparatus, especially for printed products. The patent, as reexamined, contained Claim 2-7 and 10-21. Claims 12 and 20 have been disclaimed by Ferag leaving claims 2-7, 10, 11, 13-19 and 21 extant in the reexamined Eberle patent.

Of these reexamined claims, Claims 2, 10, 13-19 and 21 are asserted against Quipp. Dependent claim 10 was in the original Eberle patent and consists of Claim 10 and Claims 9, 8 and 1. Claims 13-19 and 21 were added during reexamination. Claim 2 was made dependant upon claim 14 during reexamination and, as such, is itself a new claim.

The Patent relates to a gripper conveyor system in which a large number of grippers are carried by a chain along a track from a pick-up point to a drop-off point. Typically, the track is suspended from the ceiling in newspaper printing facilities to transport the newspapers from one location to another within the facility. Both Ferag, through a commonly-owned United States company, and Quipp manufacture and sell gripper conveyor systems to newspaper companies in the United States.

As seen in Figure 1 of the patent, Eberle discloses an

embodiment of a conveyor apparatus, the conveyor device 1. The conveyor device 1 is designed to carry printed products such as newspapers or magazines in individual gripper clamps 5 mounted on a traction element 8.

The traction element 8 travel around a drive wheel 10, as seen in Figure 1, and then through a guide channel 9. The traction element 8 has a plurality of fittings (unnumbered) extending from it and these fittings extend downward through a slot 9a in the channel 9 as the traction element 8 passes through the channel. Each of these fittings has an arm 12 extending sideways from it and a gripper clamp 5 is mounted on each of the arms 12.

The traction element 8 and a gripper clamps 5 mover past a cam arrangement 11, which is stationary relative to the moving clamps, as also seen in Figure 1. The cam arrangement 11 operates to close each clamp 5 on a printed product as the clamp passes the cam arrangement, in a manner hereinafter discussed.

Each clamp 5 includes a clamp housing 13, best seen in Figures 1, 4 and 5, which receives the mounting arm 12. The housing 13 is fixed to the arm 12 by a pin 14. The housing 13 includes, as part of it, a gripper tongue 7. Opposing the gripper tongue 7, and movable relative to it, is a movable clamping tongue.

The movable clamping tongue 6 is made of spring steel and, at its rear or inner end, is elongated to form a spiral 17 which encircles and is fastened to a shaft 18. The shaft 18 is, in turn, rotatably mounted in the housing 13. Thus, the spring has

great flexibility without overstressing.

The shaft 18 protrudes out of the side of the housing 13, as best seen in Figures 3 and 4, and has a lever arm 20 fixed to one end. The lever arm 20 carries a roller 21 at its free end. It is the roller 21 which rides up the cam arrangement 11 to cause the shaft to rotate and move the clamping tongue 6 toward the clamping tongue 7.

In the preferred embodiment shown by Eberle, the shaft 18 has a blocking wheel 22 formed unitarily with it. The blocking wheel 22 has a gap or recess in it. The gap 23 is designed to receive the front end 241 of a blocking pawl 24 and to latch the shaft 18 against counter-rotation once the movable clamping arm 6 engages the fixed tongue 7 and the shaft has been rotated further to a defined latching position in which tongue 7 is flexed by the closing cam 11.

The pawl 24 is journaled on shaft 25, which also is mounted in the housing 13. A leg spring 27 encircles the shaft 25 and urges the front end 24a of the pawl against the blocking wheel 22. The other end 24b of the pawl 24 protrudes out of the housing 13 in position to be toggled so as to lift the front end of the pawl out of the aforementioned gap 23 in the blocking wheel 22 when it is desired to release the printed product from clamp 5.

This toggling is effected by an opening device including a roller 29, best seen in Figure 2. The roller 29 can be raised or lowered by an air cylinder 30. When the roller 29 is in its lowered position, it is engaged by the free end of 24b of the pawl as the clamp 5 travels past so as to rock the pawl 24 and release the shaft 18.

In operation of the preferred embodiment, the traction element 8 moves in the direction as depicted in Figure 2. The cam roller 21 for each clamp 5 rides up on the cam 11 as it passes the cam while a printed product 2 is brought into position between the separated clamping tongues 6 and 7.

A the cam roller 21 rides up on the cam 11 it causes the shaft 18 to rotate. This moves the movable clamp tongue 6, which is formed of spring steel, toward the printed product 2 until the free end, or clamp portion, of the movable tongue 6, which carries a rubber tip 16, engages the product 2. It continues to bend until the roller 21 reaches the top of the cam 11.

As the roller 21 passes the top of the cam 11 while the corresponding clamp 5 travels along, the shaft 18 tries to rotate back to its original position under the urging of the spring force of the now bent movable clamping tongue 6. To prevent this counter-rotation, the gap or recess 23 in the blocking wheel on the shaft 18 is positioned so that the front end 24 a of the blocking pawl falls into the gap as the shaft starts to counter-rotate. The shaft 18 is thus, locked in this rotated position by the latching mechanism of pawl 24 and gap 23.

The spring force of the bent moveable clamping tongue 6 then tends to hold the pawl front end 24a in the notch 23 until the pawl 24 is toggled in the described manner to release this latching mechanism. When the pawl 24 is toggled out of the gap 23, the stored energy in the bent spring steel clamping tongue 6, causes the shaft 18 to counter-rotate instantly and the product to be instantly dropped.

Eberle points out that the latching device described

is merely an example of one having a defined latching position. Modifications of the pawl blocking arrangement could be used, or some other entirely different releasable latching device, according to Eberle.

Advantages which the inventor was being achieved by the preferred embodiment over the prior art are summarized at Column 1, line 47, through Column 2, line 29 of the patent. There Eberle points out that:

> the spring element exerts a resilient closing force on the clamping portion of the free end of the tongue;
>
> the resilient closing force varies with the thickness (and, thus, the weight of the product being gripped;
>
> the resilient force of the spring element also ensures that the latching device remains locked until release is triggered;
>
> the device is economical and reliable and requires a minimum of maintenance.

As previously pointed out, Ferag asserts Claims 2, 10, 13-19 and 21 against Quipp.[1] For the purposes of trial, however, Ferag agreed that consideration of Claims 10, 13, 14, 16, 17, 18, and 21 is sufficient. Claim 10 was in the original

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[1] These claims are attached as Exhibit A.

patent and comprises claims 10, 9, 8 and 1. Claims 13, 14, 16, 17, 18 and 21 were added during reexamination. Claim 13 is in independent form and Claims 14, 16, 17, 18 and 21 have various dependencies described herein.

The Eberle patent was examined as an original application and reexamined as a patent before Claim 10 was certified as patentable in the reexamination process. During that reexamination process, Claims 13, 14, 16, 17, 18 and 21 were added to the patent.

In reexamining the Eberle patent, the Patent Office Examiner relied upon the Rathert U.S. Patent No. 4,231,466 in an initial rejection. The Examiner subsequently agreed, however, that the Eberle patent gripper apparatus was patentable, because it employed a bending spring which was connected to a rotational shaft and to a clamp portion of the movable clamping tongue, and this bending spring brought the clap portions together and then was itself bent to apply spring force a the shaft rotated to a defined latching position. The Examiner pointed out that although Rathert taught the use of a defined latching position, it did not teach the claimed invention and, particularly, the described structure an function. The original claim 10 was allowed. New Claim 13, 14, 16, 17, 17 and 21 were allowed for the same reason as Claim 10.

There are essentially only two issues for the Court to consider in construing Claim 10. The first issue concerns the meaning of the term "stationary" in clause (d). The second issue concerns the meaning of the phrase "defined latching position" in clause (g).

Regarding the first issue, it is Quipp's position that the term "stationary," as applied to the "control device" or cam in the preferred embodiment of the Eberle patent, means that the cam is rigidly mounted. It is Ferag's position that the term "stationary" means only that the control device stays in one place relative to the travel of the conveyor chain. Ferag's technical expert, Dr. Abel, understands the term "stationary" to mean that the closing cam stays in one place relative to travel of the conveyor chain and grippers.

Regarding the second issue, it is Quipp's position that the phrase "defined latching position" means that the shaft must be latched in a single rotational position for all thicknesses of product which the apparatus is capable of handling. It is Ferag's position that the phrase "defined latching position" means a rotational position of the shaft which is selected so that for some range of product thickness,s the conveyor apparatus will grip thicker, heavier products with greater force than thinner, lighter products, an the selected latching position will not change over that range. According to Dr. Abel, a "latching position" which is "defined" is one of many rotational positions of the latching element (and, thus, the shaft) which is selected so that the desired result of gripping thicker products with greater force is obtained, and over at least some range of product thickness that position remains the same.

Claim 13 is slightly more detailed and, accordingly, slightly more limited in scope than Claim 10. For purposes of the infringement analysis in this case, however, the same issue which were considered with Claim 10 are before the Court with regard

to Claim 13. The terms "stationary" in clause (d) and "defined latching position" in clause (g) are in dispute. The disputes must be resolved in the same way.

Claims 14, 16, 17, 18 and 21 define gripper conveyor cam overload spring.

After the leading edge of the newspaper has moved between the open gripper jaws, that actuation arm engages and rides up the closing cam surface and lifts the movable jaw. When the cam roller rides up on the closing cam, the shaft on which the movable jaw is mounted rotates, and the free end of that jaw makes contact with either the upper jaw or a newspaper locate between the jaws. Continued rotation of the shaft as the cam roller rides further up the cam does not result in further movement of the free end of the lower jaw, since the lower jaw is restrained by its engagement with the upper jaw or the newspaper.

The Quipp-Gripp conveyor is constructed so that when a newspaper is gripped, the gripping force exerted by the lower jaw increases a the number of pages carried increases. Thus, increasing product thickness results in increasing carrying force exerted by the lower jaw.

A latching mechanism, which includes a wrap spring, latches the rotatable shaft and, thus, the movable jaw in a latching position. The wrap spring permits unrestricted rotation of the shaft in open direction as the movable jaw closes but latches the shaft against rotation in the opposite direction. A release ring unlocks the wrap spring from the rotatable shaft when engaged by an opening cam to open the gripper and release the newspaper. The wrap spring and the head portion of the rotatable gripper shaft

in the Quipp-Gripp conveyor apparatus defined a latching device whose latching position is defined by the amount of rotation of the actuation arm as it rides over the cam surface.

Quipp presets the amount of preload compression of a gripper cam load spring prior to customer installation. Neither the customer not Quipp subsequently changes it.

The foregoing description of the Quipp-Gripp conveyor is uncontroverted. Quipp agrees that its conveyor apparatus is constructed and operates substantially as described. A discussion of disputed aspects of the Quipp-Gripp conveyor apparatus construction and operation follows.

It will be recalled that the movable jaw is admitted to include a J-shaped portion which is made of a resilient, flexible material and is wrapped around the shaft before being fastened. Ferag submits that this J-shaped position is a bending spring and is especially constructed and mounted to act in its most efficient manner as a bending spring. Otherwise, there would be no reason for wrapping a jaw around the shaft before fastening it. In addition, as will be hereinafter discussed, the J-shaped portion can be seen to bend in operation as it closes on a product.

Quipp argue that the J-shaped portion of the movable jaw is not a bending spring and does not bend when the jaw closes to grip a newspaper. Quipp argues that the bulk of the resilient gripping force exerted on any product is provided by the gripper cam load spring which, according to Quipp, compresses each time a newspaper is gripped and compresses an *incrementally* greater amount for incrementally thicker newspapers. In this respect, Quipp argues it has copied the construction and operation of the

Yellow Bird Gripper conveyor apparatus of Ferag's described in the Muller patent.

The Quipp-Gripp installed at the Huntsville, Alabama Times, however, operated for an extended period of time without any cam movement and thus, with an exactly defined latching position a described in Eberle's preferred embodiment. Moreover, the J-shaped movable jaw bent away from its mounting block so that it exerted resilient gripping force ont he newspapers being gripped after the gripper passed out of the closing cam.

The Court will now address the specific issues presented at trial.

II. INFRINGEMENT

A. *Conclusions of Law*

1. Pursuant to 35 U.S.C. § 271(a), infringement of a U.S. Patent occurs when a person or entity makes, uses or sells the patented invention within the United States without authority from the patentee. Infringement is determined by interpreting the patent claims and applying those claims to the accused device. If the language of a claim literally reads upon the accused device, then the device literally infringes the patent in suit. The Patentee has the burden of proving infringement by a preponderance of the evidence. *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1582 (Fed. Cir. 1988).

2. Determining patent infringement "is a two-step process: 'the meaning of the claims must be learned from a study

of all relevant patent documents; and the claims must be applied to the accused structures.'" *Becton Dickinson and Co. v. C.R. Bard, Inc.*, 922 F.2d 792 (Fed. Cir. 1990). Claims "are always interpretable in light of the specification and prosecution history of the application that lead to the patent." *D.M.I. Inc. Deere & Co.*, 755 F.2d 1570, 1574 n.2 (Fed. Cir. 1985). Accordingly,

> Where . . . no underlying fact issue must be resolved, claim interpretation is a question of law. Thus, a mere dispute over the meaning of a term does not itself create an issue of fact. This is true even where the meaning cannot be determined without resort to the specification, the prosecution history or other extrinsic evidence provided upon consideration of the entirety of such evidence the court concludes that there is no genuine underlying issue of material fact.

Johnston v. IVAC Corp., 885 F.2d 1574, 1579 (Fed. Cir. 1989); *see also, Howes v. Medical Components, Inc.*, 814 F.2d 638, 643 (Fed. Cir. 1987) ("We note that claim interpretation in light of such evidence remains a question of law . . . .). Moreover, "conflicting opinions ont he meaning of a term which are merely conclusory do not create such evidentiary conflict." *Id.* at 1580.

Once the claim has been interpreted, a factual determination as to whether the accused product falls within that interpretation must be made.

3. Infringement may occur where the accused product is intentionally designed with the capability of functioning

within the patent's claims. *In re Certain Surveying Devices*, 214 U.S.P.Q. 900, 903 (U.S. ITC 1981). As the Court explained in *Sandusky Foundry & Machine Co. v. De Lavand, et al.*, 274 F. 607, 610-11 (6th Cir. 1921):

> Where defendants manufacture a device capable of an infringing use and sell it with the intent that it shall be so use,d they infringe the patent, even though their device is capable of a noninfringing use, and even though they go through the form of instruction that it shall be used in a noninfringing way.

4. An accused device which does not literally infringe a patent, may nevertheless infringe under the "doctrine of equivalents" if it "performs substantially the same function in substantially the same way to obtain the same result." *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608 (1950). this is a tripartite test of "function, way and result" the purpose of which

> is to make it impossible for the "unscrupulous copyist to make unimportant and insubstantial changes and substitutions in the patent, which, though adding nothing, would be enough to take the copied matter outside the claim."

Radio Steel & Mfg. Co. v. MTD Products, Inc., 731 F.2d 840, 847 (Fed. Cir. 1984)(citing *Graver Tank* at 607), *cert denied*, 469 U.S. 831 (1984).

5. A patent may also be willfully infringed. A party asserting willful infringement has the burden of proving willfulness by clear and convincing evidence. Infringement is willful if the infringer had actual knowledge of the patent but, nevertheless ignored the patentee's rights, or with no reasonable basis for believing it had a right to do the infringing acts. *CPG Prods. v. Pegasus Luggage, Inc.*, 776 F.2d 1007 (Fed. Cir. 1985). This determination must be based on the totality of circumstances. *Id.* at 1014-15.

6. The Court holds that there are no issues of fact concerning the interpretation of the disputed claims. The specification and prosecution history underlying these claims is not disputed and the trial testimony contained merely opinions regarding the meaning of the Patent's claims. Opinions which amount to no more than legal opinions, not factual assertions, do not create fact issues. *See, Becton*, at 922 F.2d 792 (Fed. Cir. 1990)(expert opinion regarding claim interpretation did not raise an issue of fact).[2]

7. Accordingly, the Court may interpret the disputed claims as a mater of law.

8. The court holds that the Eberle patent grips and transports paper products of different thickness by employing a flexible tongue whose tension increases as product thickness

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[2] The Court notes, however, that to the extent the extrinsic evidence were construed to encompass questions of fact, those questions of fact would be interpreted consistent with the Court's conclusions of this Section.

increases--thus providing greater gripping force for thicker and heavier products. This is accomplished by using an actuation element which tensions the flexible tongue against the product an by latching the tongue in a position which maintains the tension and thus, gripping force after the gripper exits the actuation element.

9. The Court holds that "defined latching position" means a latching position which will ensure sufficient tensions to grip the thinnest products within the intended range of operation an which also ensure increased tension, and thus, increased gripping force, for thicker products in that range of operation. To attain and maintain the required tension, the flexible tongue is comprised of a spring element which is rotated to, and latched at, a position which will required the spring element to flex. The flexing of the spring element caused by the rotation and latching of the clamping jaw provides the tension needed to grip the product and provides increased flexing and thus, increased gripping product's thickness increases.

According to the Background of the Invention, this characteristic distinguishes the Eberle patent from the Yellow Bird prior art. Unlike the Eberle invention, the latching position of the Yellow Bird's jaw is completely dependent on a product's thickness and has no correlation to the Yellow Bird's ability to effectively grip products within a certain thickness range. Thus, while the Eberle invention derives its gripping ability from a spring jaw that is latched in a position which cause tension in the spring, the Yellow Bird derives its gripping ability from the length of its jaw clamp which needs to be "an appropriately long length"

as a product's thickness increases. According to the Patent, this prior art embodied in the Yellow Bird:

> impairs both the proper closing operation and also immediate opening of the gripper. A faultless clamping of the seized products and a faultless opening at the desired site is not ensured for such construction. Additionally, the closed position which is governed by the thickness of the seized product does not satisfactorily take into account the requirement that thicker products . . . must be retained by greater gripping force than thin products.

Thus, the Court holds that "defined latching position" is a position designed to ensure sufficient gripping force throughout the relevant product range. In other words, a latching position is determined or limited by the amount of jaw flexing required for effective gripping over the relevant product range and not completely dependent, as wa the Yellow Bird, on the thickness of each individual product it grips.

10. The Court also holds that "defined latching position" does not require that the latching position be *exactly* defined, or identical, throughout the relevant product range. Instead, it is sufficient if the range of latching positions is governed not by the range of product thickness, but by the amount of spring tension necessary to effectively grip a particular range of products. In other words, a latching position determined or limited, by the amount of jaw flexing required to effectively grip

the relevant product range and which is not completely dependent, as was the Yellow Bird, on the thickness of each individual product it grips.

While the invention and the preferred embodiment describe a latching position which is "*exactly* defined," *i.e.* fixed throughout the entire range of thickness, and which is secured by a pawl and notch arrangement, the patentee expressly states that the "invention is not limited [to the preferred embodiment], but may be otherwise variously embodies and practice within the scope of the following claims." The patentee is the lexicographer of the claim and the claim cannot be limited by the scope of the disclosed embodiment. *SRI International v. Matsushita Electric Corporation of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985). The claims asserted by Eberle do not comprise an "exactly defined" latching position, but merely "a latching device having a defined latching position."

Thus, the Court concludes that while an exactly defined latching position certainly falls within the scope of this claim, the claim is broader and also encompasses embodiments where the latching position varies somewhat vis-a-vis product thickness, but which is nevertheless defined or limited, to ensure sufficient tension, and thus, gripping force, in the spring element rather than simply conforming to the product's thickness.

11. The Court interprets the phrase "stationary control device" contained to mean a control device which is stationary relative to the horizontal direction of the grippers. The Court holds that this term doe snot mean stationary in a direction transverse to travel. The patent indicates that the Eberle invention

employs a stationary device like those found in the prior art. While the Yellow Bird's control device was stationary relative to the direction of the conveyor, it did pivot vertically about a fixed point. The Court interprets the phrase "stationary control device" consistent with its application in the Yellow Bird, because that application was incorporated into the Eberle patent.

B. *Findings of Fact*

1. The Court finds by a preponderance of the evidence that the Quipp grip (Gripp) literally infringes the Eberle patent.[3] First, based on the operation of the Quipp grip (Gripp?) in Huntsville and the evidence Plaintiff produced regarding cam spring compression the Court concludes that the Quipp grip was designed with the capability and intention of operating, and indeed has operated successfully, with an *exactly* defined latching position. Thus, the Court finds that the Huntsville gripper, as observed by Plaintiff's expert, operated consistent with its design and that such operation infringes the Eberle Patent. This highlights the difference between the quipp-Gripp and the Yellow Bird, the latter of which could not function with a rigid cam. In this regard, the Court is unconvinced that the cam spring compression observed by Plaintiff's expert at Huntsville caused the Quipp grippers to wear prematurely.

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[3] A comparison of the asserted claims and the accused device is attached as Exhibit B and incorporated into the Court's findings of fact.

Second, the Court finds that even if the Quipp Gripp operates as described by the Defendant's witness, it nevertheless utilizes a defined latching position albeit not an exactly defined latching position. Specifically, the Court finds that the Quipp Gripp employs a flexible tongue consisting of a spring element, and that while cam movement may cause the clamping jaw to latch in slightly different positions with different product thicknesses, the range of latching positions is nevertheless limited or defined by the cam compression to ensure sufficient tension in the spring element of the flexible tongue which increase a the product thickness increases. Indeed, the evidence established that the Defendants understood that the range of latching positions needs to be limited or "defined" in order to provide reliable gripping force. For instance, the Kipp letter of October 11, 1991, demonstrates that the Quipp Gripp's cam compression was designed to insure that the flexible jaw "latched" in a position which provided sufficient tension to grip products over the relevant range of thickness rather than completely accommodate all changes in product thickness. In response to a customers complaints that the Quipp-Gripp was dropping products, Kipp instructed the customer to increase the cam's compression, thus, decreasing or further defining the latching position. Accordingly, it is apparent that unlike the Yellow Bird, the Quipp-Gripp employs a latching position which is determined to ensure that the flexible tongue is sufficiently tensioned over the entire range of product thickness.

Thus, the Quipp-Gripp employs the very innovation which distinguished the Eberle patent from the prior art Yellow Bird--it employs a spring element clamping jaw and a latching

position which is designed to ensure adequate tensioning of the flexible jaw. Where the flexible jaw is not gripping product effectively, the cam compression is increased to further define or limit the latching position and thereby produce more reliable gripping force. Like the Eberle patent and unlike the Yellow Bird, the Quipp Gripp's latching position controls the amount of gripping force exerted by the clamping jaw. Even if the latching position may change slightly, this change does not equate with the change in the Yellow Bird and can best be described as either an inferior embodiment or a characteristic which serves purpose other than providing gripping force. *See, Shamrock Technologies, Inc. v. Medical Sterilization, Inc.*, 903 F.2d 789,790 (Fed. Cir. 1990). This is especially true given the operation of the Quipp-Gripp in Huntsville and the instructions given to a Quipp customer by Mr. Kipp.

2. Even if defined latching position is construed as an exactly defined latching position, the Court finds by a preponderance of the evidence that the Quipp-Gripp nevertheless infringes under the Doctrine of Equivalents. That is, it performs exactly the same function (gripping products of varying thicknesses), in substantially the same way (as described above) with substantially the same result (reliable gripping derived from a latching position which ensures sufficient tensioning of a flexible clamping tongue). Again, any movement of the cam is best characterized as either an inferior embodiment which is unrelated to the tripping ability of the flexible tongue.

3. The Court finds that Plaintiff has not established by clear and convincing evidence that the Defendant

willfully infringed the Eberle Patent.

III. VALIDITY

A. *Conclusions of Law*

1. A patent may be invalid if the subject matter it claims was sold or offered for sale to the public more than one year prior to the filing date of the patent application. *UMC Elec. Co. v. United States*, 816 F.2d 647, 656 (Fed. Cir. 1987), *cert denied*, 484 U.S. 1025 (1988). A party challenging the validity of a patent ha the burden of proving by a clear and convincing evidence, that the Patent Office erred. *Builders Inc. v. Kason Indus.*, 849 F.2d 1461, 1463 (Fed. Cir. 1988).

2. A party asserting an "on-sale" defense to infringement must prove by clear and convincing evidence "that there was a definite sale or offer to sell more than one year before the application for the subject patent, and that the subject matter of the sale or offer to sell fully anticipated the claimed invention or would have rendered the claimed invention obvious by the addition of prior art." *UMC Elec. Co. v. United States*, 816 F.2d 647, 656 (Fed. Cir. 1987), *cert denied*, 484 U.S. 1025 (1988). This determination is a question of law. *Id.* at 657. The patent owner must have had an intent to sell the invention prior to the bar date and that intent must be communicated to the public for the purposes of eliciting a sale prior to the bar date. *Envirotech Corp. v. Westech Eng'g, Inc.*, 904 F.2d 1571, 1574 (Fed. Cir. 1990).

3. The purpose of the "on-sale"

> bar is todiscourage removal of intentions from the public domain that public reasonably has come to believe are freely available; favoring prompt and widespread disclosure of inventions; allowing the inventor a reasonable amount of time following sales activity to determine the potential economic value of the patent; and prohibiting the inventor from commercially exploiting his invention beyond the statutorily prescribed time.

Envirotech Corp. v. Westech Engineering Inc., 904 F.2d 1571 (Fed. Cir. 1990). In light of these policies:

> (1) the complete invention claimed must have been embodied in or be obvious in view of the thing offered for sale;
> (2) the invention must have been tested sufficiently to verify that it was operable and commercially marketable; and
> (3) the sale must be primarily for profit rather than for experimental purposes.

King Instruments Corp. v. Otari Corp., 767 F.2d 853, 859 (Fed. Cir. 1985).

3. Thus, merely preparing to sell the product

does not render the patent invalid. *Envirotech* at 1574. Likewise, communications to the public of an intent to sell an invention made while the invention is still inoperative or unmarketable do not render the patent invalid. *Shatterpoof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 623 (Fed. Cir. 1985), *cert. dismissed*, 474 U.S. 976 (1985). Rather, the invention must have been reduced to practice, *i.e.*, "sufficiently tested to demonstrate that it will work for its intended purpose." *General Electric Co., v. United States*, 654 F.2d 55, 62 (Ct. Cls. 1981). Finally, the patent owner must intend and the customer must understand at the time of the sale that the invention is included in the product being sold. *Envirotech*, at 1576. Where there is no such understanding, and the invention is subsequently incorporated in the product delivered, the patent is invalid only if the subsequent incorporation occurs prior to the bar date and only if the incorporation is communicated to the customer. *King Instru. Corp. v. Otari Corp*, 767 F.2d 853, 860 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1016 (1986).

4. A sale or offer to sell under 35 U.S.C. § 102(b) must be between two entities. *In re Caveney*, 761 F.2d 671 (Fed. Cir. 1985). In determining whether a subsidiary or distributor is a separate entity for the purposes of § 102(b), the Court must determine whether the subsidiary or distributor exercises independent control over its operations. *See id.* (court consider degree of control in evaluating whether entities were separate).

5. A patent may also be invalid under 35 U.S.C. § 103 if its claims would have been obvious at the time they were

made. This is a question of law based on underlying factual inquiries. The test for obviousness is whether the claimed subject matter would have been obvious to a person of ordinary skill in the pertinent art at the time the patented invention was made. *Vandenberg v. Dairy Equip. Co.*, 740 F.2d 1560, 1568 (Fed. Cir. 1984). A conclusion of obviousness may be based on combined teachings of two or more references if the prior art teaches or suggests such a combination. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988). Where a party relies on prior art which was considered by the Patent Office, or is as pertinent as the art considered by the Patent Office, the party has the added burden of overcoming the deference that is due a qualified government agency. *Datascope Corp. v. SMEC*, 776 F.2d 320, 327 (Fed. Cir. 2985, *cert denied*, 493 U.S. 1024 (1990). The level of ordinary skill must be determined at the time the invention was made. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, (1574) (Fed. Cir. 1986), *cert denied sub nom.*, *Stora Kopparbergs Bergslags AB v. Crucible, Inc.*, 479 U.S. 1034 (1987). The Court must consider the scope and content of the prior art; the differences, if any, between each claim and the prior art; the level of ordinary skill in the pertinent art at the time the invention of the patent in suit was made; and the objective evidence of commercial success, such as a long felt but unresolved need and copying by competitors. *In re O'Farrell*, 853 F.2d 894, 902 (fed. Cir. 1988).

7. After reviewing the evidence and based on its findings of fact, the Court holds that the patentable concepts contained in the Eberle Patent discussed in the Section II's findings

of fact and conclusions of law, which not obvious in light of the prior art which existed at the time of the invention. Rather, the objective indicia demonstrate that the patent was not obvious to those skilled in the trade.

8. After reviewing the evidence presented and based on its findings of fact, the Court concludes as a matter of law that for the purposes of 35 U.S.C. § 102 the Defendant has failed to establish by clear and convincing evidence that the Plaintiff sold or offered to sell the Eberle invention more than one year before attempting to patent that invention.

B. *Findings of Fact*

1. The court finds that the bar date for the Eberle patent is January 15, 1980.

2. The court finds the testimony of Defendant's witness Robert Smallacombe unconvincing based on his bias, inaccuracy and lack of specific knowledge concerning the exact nature of the products Ferag AG was offering prior to January 15, 1980.

3. The court also finds that the testimony of Mr. Hyatt does not clearly establish that Ferag AG sold or offered to sell the Eberle invention prior to January 15, 1980. Moreover, to the extent Hyatt's testimony does support such a conclusion, it is seriously undermined by the fact that his testimony came at a time he was litigating over the Eberle patent. In sum, Hyatt testimony alone or in conjunction with the other testimony and evidence is inconclusive on this issue.

4. Likewise, the Court finds the various documents introduced by the Defendants, including sales agreements and invoices, inconclusive in light of all the evidence.

5. Instead, the Court finds that the evidence Plaintiff introduced at trial, *including* the proposal drawings used by Ferag from 1978 to January 1980; the conveyor system shown customers at Ferag Ag's European facility; the promotional literature shown to customers; and the time Ferag AG first began to construct an Eberle prototype, is the most reliable and probative. At best this evidence indicates that the Eberle patent was not being offered for sale prior to January 15, 1980. At worst it critically undermines Defendant's weak showing of prior commercialization.

6. The Court finds that Ferag Inc. was not a separate entity from ferag AG for the purposes of the 35 U.S.C. § 102. The Court bases this finding on the proportion of outstanding shares held by the various parties; Ferag AG's ability to control critical materials and products; and the terms of the Operator's and Shareholder's agreements to which Mr. Smallacombe was a party.

7. The Court finds that the scope of the prior art at the time of the Eberle invention was patented included the Rathert, Hanzlik and Yellow Bird patents.

8. The Court finds that the difference between the Rathert patent and the Eberle patent is that *Eberle* uses a Flexible gripping arm which is rotated and latched in a position which ensures sufficient gripping force over a particular range of thickness.

9. The Court finds that the level of skill in the art at the time if the Eberle patent included those with engineering educations and those who had practical experience in gripping devices.

10. The Court finds that the Rathert and Hanzlik patents do not disclose or suggest a combination of elements as described in Section II and factual finding 6 of this Section.

11. That the combination of elements described in Section II and factual finding 6 distinguishes the Eberle patent from the prior art considered by the Patent Office as well as the art not considered by the Patent Office.

12. That the objective evidence of obviousness, indicates that there was a long-felt need for the Eberle invention and that this need was unsatisfied for a significant period of years despite the obviousness alleged by the Defendant. The evidence also indicates that at least one competitor of the Plaintiff recognizes the vanity of the Eberle patent.

III. ENFORCEABILITY

A. *Conclusions of Law*

1. Inequitable conduct by the applicant during patent prosecution invalidates the patent. *J.P. Stevens & Co., Inc. v. Lex Tex Ltd., Inc.*, 747 F.2d 1553 (Fed. Cir. 1984). To establish inequitable conduct the defendant must produce clear and convincing evidence that the patent applicant misrepresented or omitted information when the applicant knew there was substantial

likelihood that a reasonable examiner would have found the information material to the application. *Id.* at 1559-1560. Simple negligence or erroneous judgement is insufficient, although gross negligence may be sufficient. *Id.* at 1560. If a party establishes intent and materiality by clear and convincing evidence, the Court must determine whether the conduct was inequitable. *Id.* If the Court finds the conduct inequitable, then it must hold that the patent claims at issue are unenforceable.

2. The Court holds as a matter of law that based on its conclusions and findings in Section III, the Defendant has failed to produce clear and convincing evidence of inequitable conduct because the Defendant has failed to produce clear and convincing evidence of prior commercialization.

IV. CONCLUSION

The Court concludes and finds that the Plaintiff has proven literal and equivalent infringement by a preponderance of the evidence but has failed to establish willful infringement by clear and convincing evidence.

The Court concludes the Defendant has failed to establish invalidity and unenforceability by clear and convincing evidence.

By an order dated November 14, 1990 (D.E. #22) a predecessor judge granted the parties' motion for separate trials as to the issues of patent infringement and patent validity be tried separately from the issue of damages. Accordingly, in view of these findings of fact and conclusions of law the issue of patent infringement has been resolved in favor of the plaintiff. The issue

of damages is ripe for determination. Accordingly, the parties shall file a proposed scheduling/status order within fifteen (15) days from the date of entry of this order, setting forth the time estimated to complete discovery, the probability of settlement, the time necessary for a non-jury trial on the issue of damages, and any other matters the parties wish to bring to the Court's attention which will facilitate the completion of this cause.

DONE and ORDERED, in Chambers, Miami, Florida, this 15th day of September, 1993.

Page 20, Line 1 - Page 20, Line 22:

Q Was there a conveyor which was part of the Stuttgart system or each Stuttgart system which was used to remove or take product away from the inserting drum?

A Would you mind to repeat the question one more time to me?

Q Was there a conveyor which was used to take product away from the inserting drum?

A Yes.

Q And what was that conveyor called, if it had a name?

A End product conveyor.

Q Since you gave me a list of seven major components, did you group the end product together with the inserting drum?

A Yes.

Q Could you describe just generally what this end product conveyor comprised at Stuttgart?

A The conveyor picked up the inserted product from the inserting drum and transferred those back onto the TTR.

Page 86, Line 22 - Page 87, Line 6:

Q Stop me if I've asked you this already, but was the same thing done with the Bergen Record people?

MR. SPRINGER: By "the same thing" you mean what?

BY MR. LIONE:

Q A trip to Europe to see Ferag equipment installations in Europe?

A Yes.

Page 746, Line 6 - Page 746, Line 12:

Q. Mr. Marczak, I'm going to hand you a series of five drawings, which are in evidence as Plaintiff's exhibits 20, 32, 78, 69, and 86, and ask you to take a look at them, asking you in advance to tell us whether you prepared the drawings.

A. I did prepare these drawings, these five drawings that I was handed.

Page 746, Line 19 - Page 746, Line 25:

Q. Can you, as you go through them -- maybe it would be easier this way. I'm going to ask you another question. And that is can you tell me whether a track layout for a conveyor apparatus is shown in each one of them which employed a -- or which would mount a track carrying an EP 85 gripper?

A. The first one does have that information on it.

Page 747, Line 23 - Page 748, Line 3:

Q. Would you -- in passing through them, and I invite your attention, particularly -- or, for example, to Plaintiff's exhibit 20, can you tell me whether any of those five

drawings shows a transfer from an E 85 type gripper to a SCC type gripper as far as the track layout is concerned?

A. Exhibit 20 does.

Page 397, Line 1 - Page 397, Line 9:

Q. Did Mr. Hatt work with you during some of your marketing trips?

A. Yes, he did.

Q. Did he work with you in some proposals to customers?

A. Yes. He prepared, had the preliminary responsibility for preparing the technical side of the proposal. I would prepare what we can refer to as the financial side, the terms, delivery dates and general, legal boilerplate. But he prepared the technical proposal.

Page 449, Line 5 - Page 449, Line 10:

Now, you keep referring to these as proposal drawings. A proposal drawing to me -- and they certainly say "proposed Ferag system," but what I'm saying to you is proposal drawing in the way I was describing it is something that was brought to the client, usually prior to his awarding us the contract. It was a proposed system.

Page 459, Line 3 - Page 459, Line 20:

Q. And if you would look on the last page of this document. For example, it shows the inserting system with the end

product conveyor going back connecting to the EP conveyor, connecting to the SCC conveyor, does it not?

A. Delivery of end product stackers. But it doesn't really identify, you know, which conveyor it was. But you are right, there is a conveyor coming out of the inserting system and then returning to the stackers. But I can't tell from this. This is just an artist's sketch. I mean, there is no, I can't tell you what kind of conveyor it is. It's just a ribbon with an arrow.

Q. But it's returning to the same path as the path that the product was on when it came to the inserting system?

A. It seems to be, yeah.

MR. LIONE: Your honor, I offer Plaintiff's Exhibit 131 into evidence.

MR. KILLEEN: No objection.

THE COURT: Will be admitted into evidence.

(Plaintiff's Exhibit 133)

PARTNERSHIP AGREEMENT DATED MARCH 13, 1979, BETWEEN FERAG, INCORPORATED (U.S.), FERAG AG (SWITZERLAND) AND THE BERGEN EVENING RECORD CORPORATION

This Agreement covers the intent of both Ferag (both United States and Switzerland) and The Bergen Evening Record Corporation to install the Ferag inserting system, both prototype and production models, in the Record's Hackensack, N.J., newspaper plant. The prototype drum is the first drum to be installed at The Record, and the production model drum is the second drum to be installed. With use, it is possible that the production model drum may differ slightly from the prototype drum to improve its production efficiency.

1. Ferag and The Board have agreed to install in Hackensack two (2) identical production models of the Ferag inserting system, each system being composed of one production model inserting drum and ancillary equipment (some combination of palletizers, depalletizers and hoppers), and conveyors from two new offset presses to the Ferag inserting system as well as conveyors from the Ferag inserting system to new typing lines. The basic preliminary configuration of the new presses, Ferag inserting systems, and new tying lines are shown in gross detail on print No. 1.

2. Prior to completing this final installation, Ferag and The Record will complete a prototype installation consisting of one prototype Ferag inserting system. This system will be composed

of a prototype Ferag inserting drum and some combination of palletizers, depalletizers, and hopper feeders as well as a conveyor from the existing "C" press to the Ferag prototype inserting system and output conveyors from the Ferag prototype inserting system to two (2) primary and two (3) secondary tying lines as shown in gross detail on print No. 2.

* * * * *

THE RECORD

—HACKENSACK, NEW JERSEY

FERAG TTR - ON-LINE INSERTING SYSTEM

PLAN AND SECTIONS

-A59-

SCALE 1/4"=1'-0"

DATE MARCH 23, 1979
DRAWN BY FRANK MARCZAK

[redacted] LNC BRISTOL, PA

2 4'-0"
7315

PD-790323-R

Fa

22

PLAINTIFF'S EXHIBIT NO. 20

THE MARCH 23, 1979 BERGEN PROPOSAL DRAWING

(Defendant's Exhibit 105)

SHAREHOLDERS' AGREEMENT

SHAREHOLDERS' AGREEMENT made as of the 31st day of March, 1979, by and among FERAG AG, a Swiss corporation having an address at P.O. Box 331, CH-8340 Hinwil, Switzerland ("AG"), FERAG INC., a Pennsylvania corporation having an address at 190 Rittenhouse Circle, Bristol, Pennsylvania (the "Company"), and ROBERT J. SMALLACOMBE, an individual residing at Sycamore Lane, Skillman, New Jersey ("Smallacombe").

BACKGROUND

The Company has an authorized capitalization of 100,000 common shares, $ 1.00 par value ("common shares category A"), all of which are issued and outstanding to AG;

The Company has accumulated deficits of approximately $ 4.2 Mio and has agreed to employ Smallacombe as its president and a member of its Board of Directors and AG has agreed to sell a one-half interest in the Company to Smallacombe; by creating 100,000 new shares, $ 1.00 par value ("common shares category B").

AG and Smallacombe have determined that the fair value of a one-half interest in the Company is $ 500;

The parties hereto desire to enter into this Agreement to set forth their respective rights and obligations with respect to such stock ownership.

NOW, THEREFORE, in consideration of the mutual agreements contained herein and intending to be legally bound, the

parties hereby agree as follows:

I. PURCHASE OF STOCK

Section 1.01. Purchase and Sale. AG agrees to sell to Smallacombe, and Smallacombe agrees to purchase from AG 100,000 common shares category B, of the Company for an agreed upon purchase price of $ 500, the receipt and sufficiency whereof is hereby acknowledged.

Section 1.02. Transfer of Shares. Upon the execution of this Agreement and payment by Smallacombe to AG of the purchase price of the common shares category B, AG shall convey and assign the shares to be purchased to Smallacombe and cause the Company to issue share certificates to Smallacombe as provided in this Agreement.

Section 1.03. Representation. AG represents and warrants to Smallacombe that all said common shares are fully paid, non-assessable and free and clear of all liens and encumbrances with exception as here after stated, and that AG had due corporate power and authority to convey and assign all said common shares as provided herein. The only restriction reads as follows:
If any deficit is left and the sum equal to 50% of the accumulated deficit as of March 31, 1979 in the amount of approx. $ 2.1 Mio has not been repaid to AG on or before March 31, 1987 the objective is considered not reached and by majority vote of the holders of the common shares, category A, the issued and outstanding 100,000 common shares, category B, will be called for a total nominal value of $ 500.-

Provided, however, the objective is considered reached by not leaving any deficit and having repaid the above mentioned

deficit on or before March 31, 1987 the 100,000 common shares category B, will at the end of that financial year automatically be transferred into common shares category A.

II. PROVISIONS RESTRICTING TRANSFER OF SHARES

Section 2.01. Restrictions on Transfer.

(a) Except as otherwise provided in this Agreement, neither AG nor Smallacombe shall sell, assign, transfer, give, donate, pledge or otherwise encumber, or dispose of any shares of common stock in the Company now held or hereafter acquired by it or him. Notwithstanding the foregoing, AG may transfer its common shares in the Company to Walter Reist or a company wholly owned by his heirs.

(b) The Company shall not cause or permit the transfer of any shares of common stock to be made on its books except in accordance with the terms of this Agreement.

* * * * *

(Defendant's Exhibit 106)

OPERATING AGREEMENT

OPERATING AGREEMENT, dated March 31, 1979 by and among FERAG AG, a Swiss corporation having an address at P.O. Box 331, CH-8340 Hinwil, Switzerland ("AG"), FERAG INC., a Pennsylvania corporation having a principal office at 190 Rittenhouse Circle, Bristol, Pennsylvania (the "Company"), and FERAMATIC AG, a Swiss corporation having an address at P.O. Box 331, CH-8340, Hinwil, Switzerland ("Feramatic") and ROBERT J. SMALLACOMBE, an individual residing at Sycamore Lane, Skillman, New Jersey ("Smallacombe").

BACKGROUND

Prior to the date hereof, the Company has been a wholly owned subsidiary of AG formed for the purpose of manufacturing, selling and servicing Ferag mailroom products, components, and systems, or any of them, ("Ferag Products") in the United States and Canada. The Company was incorporated in 1969, has accumulated deficits of approximately $ 4.2 Mio and has indebtedness to AG by way of notes and accounts payable in the aggregate amount principal amount of $ 5,905,380.

The Company has entered into an Employment Agreement with Smallacombe dated as of March 31, 1979 providing, inter alia, for Smallacombe to become the President and a member of the Board of Directors of the Company. The Company, AG and Smallacombe have entered into a Shareholders Agreement of even date herewith pursuant to which AG agrees, inter alia, to sell 100,000 common shares category B of the Company to

Smallacombe.

The parties hereto have agreed to enter into this Operations Agreement to set forth the relationship among AG, Feramatic and the Company and to set further certain further agreements between Smallacombe and AG relating to the management and financial operation of the Company.

NOW THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, the parties hereto agree as follows:

I. RELATIONSHIPS

Section 1.01. Territory and FERAG Products. During the Term of this Agreement, the Company shall have the exclusive right and obligation to market, sell and service within the United States of America and Canada FERAG Products; provided, however, that the foregoing exclusive right shall not prevent either AG or Feramatic from:

(a) Selling directly or indirectly in the United States or Canada products now in existence or hereafter invented which are not part of the mailroom products or systems; or

(b) Selling directly to press manufacturers in the United States or Canada as part of a total installation of an integrated system by such press manufacturers; needs the mutual agreement of AG and the Company; or

(c) Selling abroad to any foreign company or firm (or affiliate thereof) equipment which is part of the mailroom products or systems and which such foreign company or firm, with or without the assistance of personnel from AG or Feramatic, installs in facilities in the United States or Canada without prejudice to a

special remuneration for the Company.

Section 1.02. Business of The Company. The Company's business shall be the marketing, selling, eventually manufacturing and servicing of FERAG Products, and the Company shall devote its best efforts to the promotion and sale of FERAG Products in the United States and Canada. The Company shall not substantially change the nature of its business without the prior written consent of AG during the entire period when AG remains a shareholder in the Company.

II. USE OF KNOW-HOW--MANUFACTURING--LICENSING--SERVICING

Section 3.01. FERAG Products. The Company, AG and Feramatic shall cooperate in the promotion and sale of FERAG Products in the United States and Canada; AG and/or Feramatic shall manufacture FERAG Products, and the Company shall, in the ordinary course of business, purchase products from AG and/or Feramatic. AG and/or Feramatic shall find orders placed by the Company within commercially reasonable times, as permitted by the overall production schedule, taking into account the requirements of the Company as well as those of AG and such products shall be sold to the Company at the lowest possible prices quoted by AG and/or Feramatic from time to time. In no event shall the Company pay to AG or Feramatic for any FERAG Product manufactured by Feramatic an amount greater than the price which AG pays to Feramatic for the same products.

Section 2.02. Know-How; Research and Development.

(a) AG and Feramatic has developed extensive design,

layout, engineering, planning, production, manufacturing, fabrication, installation, operating, marketing, pricing, technical and administrative experience and expertise with respect to FERAG Products and systems, and the application, development and utilization thereof which are unique and constitute trade secrets (the "Know-How"). During the term of this Agreement AG and Feramatic agree, at the request of the Company, to make the Know-How available to the Company on a confidential, hold-secret basis to the extent and at the times reasonably necessary for the conduct of the Company's business, for the price and upon the terms and conditions set forth herein.

(b) AG intends to continue the development of new products and the improvements of existing products through an active research and development program. In this connection, the Company agrees that research and development shall be conducted by AG and the Company shall pass through to AG all suggestions for the improvement of further development of the FERAG Products. AG shall share with the Company the results of such research and development as the products thereof are ready for sale.

(c) AG and/or Feramatic shall make available to the Company at its request the assistance of their technical, market, staff and management personnel in connection with the operation of the Company's business, for the price and the terms and conditions set forth herein.

(d) The Company shall pay to AG for the Know-How, research and development, consulting and management services of AG and/or Feramatic under this Section 2.02 (i) an annual fee

("service fee") of 10% calculated on the annual invoiced sales of equipment and spare parts sold by AG and/or Feramatic to the Company.

The service fee shall be paid by the Company quarterly within 30 days following the end of each calendar quarter based on the invoiced sales for such quarter, and

(ii) the reasonable out-of-pocket costs and expenses (including lodging) of providing the services described in this Section 2.02, exclusive of employees' salaries; provided, however, if any employee of AG and/or Feramatic is required to spend more than 6 consecutive weeks on assignment for the Company, AG and/or Feramatic shall be entitled to reimbursement from the Company for cost of such employee's salary.

For erectors a separate regulation is applicable.

Section. 2.03. Manufacturing. In the event the Company determines that the Company can produce any FERAG Product or component thereof of at least an equal quality in the Company's existing facilities in the United States at costs to the Company less than the price which it must pay to AG or Feramatic for such product or component, the Company may request the consent of AG and/or Feramatic to so manufacture such product or component in the United States. At the time of such request, the Company shall demonstrate to AG that it can produce such product or component of an equal quality for a lower cost and has the capital and facilities to do so. AG and/or Feramatic shall not unreasonably withhold their consent to the Company's request to manufacture in the United States and, in making such determination as whether to grant such consent, AG and Feramatic

shall have the greater interest of the Company in mind.

Section 2.04. License from AG and Feramatic. If AG and Feramatic consent to the manufacture of FERAG Products in the United States pursuant to the provisions of Section 2.03, hereof, AG and Feramatic shall grant to the Company, a non-exclusive license to use and make use of any and all patents and patent applications made or licensed to AG and/or Feramatic relating to such FERAG Products, the terms and conditions of which, including a reasonable licensing fee, shall be incorporated into a licensing agreement to be agreed upon at such time. If pursuant to the Shareholders' Agreement, Smallacombe acquires the shares of stock in the Company owned by AG, the foregoing license shall continue. If at any time Smallacombe's share ownership in the Company shall be less than 50%, the license herein granted shall terminate, except in such a recapitalization in which AG and Smallacombe own all of the common shares of the Company and provided a new licensing agreement has not been reached with the new shareholder.

Section 2.05. License by the Company. The Company hereby grants to AG and Feramatic, the non-exclusive right to use and to make use of any and all patents and patent applications made or licensed to the Company whether or not relating to the use or application of any existing FERAG Products or components. The terms and conditions of such an agreement, including a reasonable licensing fee, shall be incorporated into a licensing agreement to be agreed upon at such time. If pursuant to the Shareholders' Agreement, Smallacombe acquires the shares of stock in the Company owned by AG, the foregoing license shall

continue.

Section 2.06. Design. In connection with the sharing of Know-How, AG, Feramatic and the Company shall furnish on a confidential, hold-secret basis, at the request of any other and to the extent such information may reasonably be necessary for the purposes of the other, copies of layout plans for machinery, production design specifications, working drawings, manufacturing and process data, test specifications, material and production specifications and other pertinent information relating to the engineering, manufacture and technical control of the FERAG Products.

Section 2.07. Meetings. For the purpose of making effective use of all such information and Know-How, each of the parties shall participate in conferences and shall make and permit visits by competent representatives of the others.

Section 2.08. Improvements. The Company, AG and Feramatic shall promptly make known to each other any future developments, modifications, improvements and other advances with respect to the development, manufacture, installation, use or operation of the FERAG Products.

Section 2.09. Confidentiality. All Know-How and information received under this Agreement, or pertaining to the FERAG Products shall be kept confidential and shall not be disclosed by the party receiving the information, except that disclosures may be made of such information as is necessary for the operation of the FERAG Products. Each party accepts full responsibility that all information is kept strictly confidential and that this obligation is of a paramount importance, particularly

during the period when patents on some of the products and components or improvements thereto have not yet been applied for.

Section 2.10. Servicing. The Company shall at all times be responsible for the prompt and effective servicing of the FERAG Products, sold in the United States or Canada, whether prior to or during the term of this Agreement and regardless of whether the sale was made by the Company, AG or Feramatic; provided, however, that the Company is not hereby assuming the cost of any warranty obligations of AG or Feramatic.

III. FINANCIAL

Section 3.01. Books and Records. The Company shall maintain at its principal place of business full and accurate books of the Company, showing all receipts, expenditures, assets, liabilities, profits and losses, and all other records necessary for recording the Company's business and affairs. The books of the Company shall be kept on an accrual basis in accordance with generally accepted accounting principles, consistently applied, and shall be maintained on a fiscal year basis ending on March 31 of each year. Such books and records shall be audited by Main LaFrentz & Co., or such other firm of independent certified public accountants as AG and Smallacombe shall from time to time select. Such books and records shall be open to the inspection of AG and its duly authorized representatives at any times.

Section 3.02. Reports. The Company shall submit monthly reports during the term hereof to AG setting forth its income and expenses for such month, its financial position as of the last day of such month and such other information as to its sales and other

activities as AG shall reasonably request.

The Company shall also furnish to AG such other reports and information relating to the Company's operation and condition as AG may reasonably request.

Section 3.03. Budget At least 90 days prior to the end of each fiscal year, the Company shall prepare and submit to AG for consideration a budget for the ensuing fiscal year setting for the estimated income and expenses for the ensuing fiscal year and all projected capital expenditures. The budget shall contain such detail as AG shall reasonably request. Said budget shall be subject to the approval of AG, which approval shall not be unreasonably withheld. The Company shall not make any expenditure for any capital item having a cost in excess of $ 5,000 without the prior written approval of AG. Neither AG nor Smallacombe shall be obligated to make capital contributions, loans or advances to the Company.

Section 3.04. Indebtedness and accumulated deficit. The Company currently has an indebtedness to AG which consists of notes and accounts payable. The Company confirms such indebtedness to AG and agrees to repay it. A part of the indebtedness shall be transferred to into a note amounting to $ 832,508 to be made out, the conditions of which have to be agreed separately. AG agrees to capitalize a sum equal to 50% of the accumulated deficit as per March 31, 1979 or $ 2.1 Mio approximately.

The Company agrees to repay to AG a sum equal to the aforementioned 50% of the accumulated deficit as per March 31, 1970 or $ 2.1 Mio approx. on or before the financial year ending

March 31, 1987.

Section 3.05. Dividends. No dividends shall be paid by the Company except out of profit accruing after the sum equal to 50% of the accumulated deficit as per march 31, 1979 has been repaid as provided in Section 3.04.

Section 3.06. Certain Decisions. The mutual consent of Smallacombe and AG shall be required with respect to the following decisions relating to the Company: (a) the purchase of sale of any land or buildings; (b) the borrowing of any moneys; (c) the establishment of any subsidiary; (d) the declaration of any dividend; (e) the engagements in drafts; and (f) lease obligations exceeding $ 5,000 during the term thereof.

* * * * *